CLIMATE SMART MISSOULA

Building(s) for the Future

Climate-Smart Buildings: Mind Your E's & Q's!

6 E's & 1 Q for new builds and retrofits

1

ENVIRONMENTAL SITING

Choose urban infill to avoid sprawl & reduce transportation emissions; make parking less prominent, maximize green infrastructure (trees, shrubs, gardens); consider walk- & bike-ability

ELECTRIFY EVERYTHING

All appliances, HVAC systems, water heaters, stoves. No gas! Electrification improves indoor air quality by avoiding health risks of burning gas, & enables cooling during hotter summers.

More at **electrifymisssoula.org**

2

3

ENERGY EFFICIENCY

Building better than code makes a difference. Insulation, LED lighting, not too much glass (esp. north-facing), and reasonably tight. What's the smallest building needed so that heating and cooling systems (#2) can be sized right and operate most efficiently?

ENERGY ON SITE

Maximize on-site renewable energy via solar and/or geothermal. If that's not possible with today's budget, build "solar ready". Don't worry about battery storage today – it can be added later if pricing makes sense, or perhaps your stove or EV will provide backup storage!

4

5

EMBODIED CARBON

AKA emissions from building materials, from production to point of use. Choose cellulose (good) vs rigid insulation and common spray foams (bad). Building with wood (e.g. Cross Laminated Timber - CLT) is great!

See **buildersforclimateaction.org** for so many ideas!

EV CHARGING / EV READY

Future drivers will want to plug in their EVs. Can you add level 2 charging infrastructure? At minimum, prepare the site to be "EV charging ready," including power to and from the electrical breaker box and conduit from the building to the identified location.

6

And 1 question - Can we build for the future, today? *(answer: yes!)*

Building(s) for the Future: *A collaboration of Climate Smart, Missoula County & the City of Missoula*